

PROJECT PROPOSAL

March 2009



Fuel Efficient Stoves Qinghai Province

Pilot Project

Summary

Organization: Children of Shambala (CoS)

Location: Qinghai Province, China

Name of Project: Fuel Efficient Stoves to Qinghai Province – Pilot Project

This is a pilot project that aims to introduce and test the applicability of fuel efficient **Purpose of Project:**

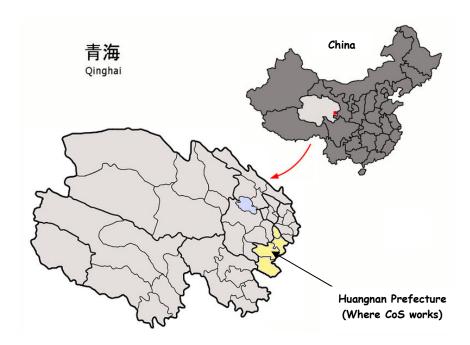
stoves in 3 communities of Qinghai Province. The experiences gained through the project will form the basis of our extensive effort to introduce fuel efficient stoves in the region.

Total Project Budget: 66.000 RMB (9,851 US\$)

57.000 RMB (8,507 US\$) **Amount requested:**

Jan Terje Voilaas **Contact:** Name:

Cell phone: + 86 137 09 72 13 79 Email: cos.jtvoilaas@gmail.com



This project will take place in remote areas of Huangnan Prefecture (marked yellow on the map), one of the most impoverished areas of Central Asia

Fuel Efficient Stoves To Qinghai Province

A problem to solve

Qinghai Province suffers from the lack of sufficient bio-fuel. Extensive use of low efficient stoves and even open fire for cooking and heating causes numerous problems such as:

Environmental problems: Deforestation, desertification, high emissions of carbon dioxide.

Health problems: High emission of carbon monoxide and particles. (Lower respiratory infections

are the leading cause of death in low income countries, WHO.)

Carrying heavy loads and spending much time in smoke and particles cooking,

highly affect rural women's health.

Gender Problems: Much time is spent on collecting fuel and cooking, which adds to the general

burden of rural women.

Education problems: Much time is spent on collecting fuel. This is mostly done by young girls and

women that - in many cases - results in lower school attendance and drop-out

from school among young girls.

Financial problems: Increasing prizes on fuel puts an extra burden on the poor.

It is estimated that approximately 500.000 low efficient stoves are in use in Qinghai Province. This comes in addition to a similar number of bio-fuel heated beds. It is further estimated that 50-70.000 stoves are replaced annually.

Solution

The above problems have for years been tried to be solved with solar cookers. To our experience this has not been successful. The introduced solar cookers are of poor quality and fall easily apart, they are heavy (not portable) and are generally not accepted among people as a replacement for traditional stoves. According to our observations, very few people use their solar cookers on a regular basis.

We believe that local peasants and nomads will more likely accept and use stoves that are more similar to traditional open fires and existing stoves. The Fuel Efficient Stove project is about finding out whether this presumption stands.

We will invite one Tibetan village, one Han/Hui village and one group of nomads to test Stove Tec's portable, light weight and highly efficient Green Fire Two Combo stove for 8 months. This project will be a close cooperation between the villages/nomads and CoS. The Green Fire Two Combo Stove is a result of 25 years experience, experiments and testing. The latest laboratory and field test reports can be found at:

 $\frac{http://www.stovetec.net/mambo/images/Laboratory\%20Performance\%20of\%20the\%20Chinese\%20stoves.pdf}{http://www.stovetec.net/mambo/images/Field\%20test\%20results.pdf}$

Goals

This project is a pilot project with the goals to:

- > Gain detailed information on the hardships the local communities face every day when making fire using the scarce sources of their environment
- > Understand the social context of the task of making fire
- > Test fuel efficient stoves in high altitude areas on locally available fuel sources
- > Test alternative stoves on different minorities under different living conditions
- Measure the efficiency of and the acceptance toward fuel efficient stoves
- > Create local demand for fuel efficient stoves

On longer term we hope to address the mentioned problems on broad bases by:

- > Introducing and testing different stoves for different purposes used with different kind of fuel under different local conditions
- ➤ Build local capacity and spread the knowhow on the new technology
- Establish local decentralized stove production in order to create alternative income

Fuel efficient stoves will at the end have significant and sustainable effect on cross-cutting themes like:

Gender Equality: Women will manage, design, participate and implement this and future stove projects.

Mainly women will benefit from the everyday use of fuel efficient stoves.

Environmental protection: Fuel efficient stoves will significantly reduce bio-fuel consumption and emissions of C₂O

and PM.

Health: Fuel efficient stoves will reduce heavy loads being carried by women on their backs.

Fuel efficient stoves will dramatically reduce women's exposure to CO, other harmful

particles and smoke both in peasants' households and in nomads' tents.

<u>Education:</u> Reduced time spent on collecting fuel will increase young girls' chance to attend school.

Income generation: Reduced time spent on collecting fuel can be turned into income generating activities.

Stove production can create highly needed alternative sources of income on village level.

Who

Managing Director Jan Terje Voilaas will have the overall responsibility for this project.

Program Director Jiumao Cou will manage parts of this project.

Jiumao's family originally comes from a village in Tongren County. Jiumao is a local ethnic amdo Tibetan woman educated in Xining, Beijing and Japan. Jiumao has an MBA from Asahi University, Japan. Jiumao knows the area very well, speaks the local language and benefits from an extended local network of acquaintances.

Project assistant Sangjii Drolma (graduated from Qinghai ETP) and ETP student Danmanjyid Danma will do most of the "on-site" work together with villagers and nomads.

Sangjii Drolma comes from a Tibetan village near Guide and knows one of our target villages (Onlok Village, Tongren County) very well. Danmanivid Danma comes from a nomad family in Gansu.

Both Sangjii and Danmanjyid are tri-lingual Amdo Tibetans girls with experience from several small scale development projects. They are both members of Shem Women's Group, an unregistered but active NGO.

Planned activities

- 1. Introduce and clarify the framework of the project with the provincial government
- 2. Purchase 10 stoves for demonstration purposes
- 3. Select target areas, two villages and one nomad community in Huangnan Prefecture
- 4. Conduct a detailed field research documenting fuel usage (type, amount, etc.), cooking habits and cooking means in each household. (Field Research 1)
- 5. Demonstrate and implement a Water Boiling Tests in each target area.
- 6. Invite 150 households to cooperate. Establish the roles and the timeframe.
- 7. Distribute one stove to each household in the target area. Demonstrate, teach, and train.
- 8. Conduct first follow up research. (Field Research 2)
- 9. Conduct second follow up research. (Field Research 3)
- 10. Prepare final documentation and Final Report.

Our time frame is:

Year	2009							2010					
Month	3	4	5	6	7	8	9	10	11	12	1	2	3
Field Research 1													
Order Stoves													
Receive Stoves													
Implementation													
Field Research 2													
Field Research 3													
Final Report									,				

The Final Report will be distributed to donors and be published on CoS' web-page no later than March 2010.

Beneficiaries

Approximately 750 people will benefit directly from this project; 250 Tibetan nomads, 250 Tibetan peasants and 250 Hui/Han peasants.

If succeeds, this project will form the basis of a future project of introducing fuel efficient stoves to the region.

Government

This pilot project is approved and warmly welcomed by authorities on both provincial and county level.

Advisers

To gain maximum effect and experience from this project, we have been and will continue consulting several organizations and individuals with extensive experience and knowledge on fuel efficient stoves. To mention some:

Aprovecho Research Center: Aprovecho Research Center is a 501 (c)(3) non-profit organization with 30 years

experience on fuel efficient stoves. The stove used in this project is developed and

designed by Aprovecho Research Center.

Stove Tec: The Green Fire Two Combo Stove used in this project is produced by Stove Tec.

Paal Wendelbo: Norwegian expert with more than 25 years experience on stove technology and fuel

efficient stoves designed and used in developing counties in Africa. Paal Wendelbo is the

inventor of the Peko Pe Stove

Budget

FUEL EFFICIENT STOVES PILOT PROJECT

Phases	Activities				RMB	US\$
Assessing Needs	Field research 1	Village 1			2 500	373
_		Village 2			2 500	373
		50 Nomads			2 500	373
	Reporting				500	75
Detailed Planning	Detailed Planning				1 000	149
Subtotal					9 000	1 343
Implementation	Stoves	Purchase	150	100	15 000	2 239
		Packing	75	20	1 500	224
		Transport	1 500	10	15 000	2 239
	Village 1	Distribution	2	500	1 000	149
		Field Test	1	1 500	1 500	224
		User-training	1	1 500	1 500	224
	Village 2	Distribution	2	500	1 000	149
		Field Test	1	1 500	1 500	224
		User-training	1	1 500	1 500	224
	Nomads	Distribution	2	500	1 000	149
		Field Test	1	1 500	1 500	224
		User-training	1	1 500	1 500	224
	Field management	Village 1	2	1 000	2 000	299
		Village 2	2	1 000	2 000	299
		Nomads	2	1 000	2 000	299
Subtotal					49 500	7 388
Follow up	E' 11D 1 2	X7'11 1			1 000	1.40
	Field Research 2	Village 1			1 000	149
		Village 2			1 000	149
	7.117	50 Nomads			1 000	149
	Field Research 3	Village 1			1 000	149
		Village 2			1 000	149
		50 Nomads			1 000	149
	Reporting				1 000	149
Final Report	Final Report				500	75
Subtotal					7 500	1 119
Total cost					66 000	9 851
i utai Cust					00 000	7 031

Approximately 52% of the total cost is connected to purchase, transport, storage and distribution of the stoves. 48% is estimated to be spent on field research, field tests, capacity building and documentation. In future projects the cost per stove will drop with 50-60%.

CoS has managed to raise 9.000 RMB for this project from private donors in Norway.

Requested financial support is 57.000 RMB (8,507 US\$)

Children of Shambala

Organizational Mission:

Children of Shambala (CoS) is an independent humanitarian not-for-profit organization alleviating poverty and improving the livelihoods of impoverished rural remote communities in China's western regions. CoS cooperate closely with local groups, individuals and authorities to develop, finance and implement projects which improve local conditions primarily those related to children and young people. CoS focuses on children and primary education. CoS considers education a vital element in long-term sustainable development.

Where and why

Despite China's rapid economic growth, there are areas, particularly in the mountainous areas of the western and northern regions, which still suffer from extreme poverty. These areas are characterized by few urban centres and many small, remote and often isolated villages. The greater part of the area is dry and barren with short, cool summers, and long, bitterly cold winters. There are frequent winds, little rainfall, and a great temperature difference between day and night.

A large part of the population is nomadic or semi-nomadic depending on animal husbandry, small-scale farming and existing natural resources for their livelihoods. Annual cash income for many households can be as low as 50 to 300 US\$ supporting 4-8 family members. Illiteracy is high and children, especially girls, often drop out of school at a very young age. The long, cold winters of this area add an extra burden for poor people. The need for fuel and firewood, clothes and calories are dramatically higher than in other impoverished parts of the world. A greater part of this region belongs to the most impoverished areas of Central Asia.

This is where CoS works

Facts

Founded: 2006

Annual budget: 150.000 USD
Number of Staff: Foreign Staff: 1

Local Staff: 5

Sources of funding: Individual and organizational donors

Projects (March 2009): Completed: 35 In progress: 43

Governance

Organization name: Stiftelsen Children of Shambala

Registered: Norway
Organization number: 993 287 539

Board of Directors: Georg Orvedal <u>georg.orvedal@aktivenergi.no</u>

Member:Torill Michalsentorill.michalsen@bgm.noMember:Bengt Michalsenbgm@aktivenergi.noMember:Anita Grandemoanita@villamatilda.no

State Authorized Auditor:

Accountant:

Barbro Hanekamhaug
Ulsbøl Regnskap

Contact details

Web-address: www.childrenofshambala.org

Managing Director: Jan Terje Voilaas Phone: (+86) 137 09 721379

E-Mail: voilaas@gmail.com

Operation Director: Wang Suwen Phone: (+86) 138 097 180726

E-Mail: suwenwang@yahoo.cn

Program Director Jiumao Cou Phone: (+86) 138 972 10741

E-Mail: <u>jiumao2000@yahoo.com</u>

Postal Address

In Norway: Stiftelsen Children of Shambala

Gamle Rygene Kraftsstasjon, Lunde 8

4885 Grimstad

Norway

In China: Wang Suwen

Room 201, Unit 1, No 1 Building,

Tejiao Xiaoqu, Xuefuxiang, No 37 Wusi Xilu, Xining,

Qinghai. 810007.

Peoples Republic of China

汪愫文

中华人民共和国青海省西宁市 五四西路37号学府巷特教小区 1号楼1单元201室。810007

Bank information

In Norway Bank Name: Sparebanken Sør

Bank SWIFT CODE: AASPNO22 Account Number: 2801 20 73056

Account Holders Name: Children of Shambala

In China Bank Name: Bank of China, Qinghai Branch

Bank SWIFT CODE: BKCHCNBJ 280
Account Number: 347880020030970
Account Holders Name: Voilaas Jan T.
Costumer number: 3469 0620396